



**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
 NATIONAL MARINE FISHERIES SERVICE  
 Silver Spring, MD 20910

APR 5 2006

MEMORANDUM FOR: William T. Hogarth, Ph.D.  
 Assistant Administrator for Fisheries

FROM: *for Harry F. Mayer*  
 Patricia A. Montanio  
 Director, Office of Habitat Conservation

SUBJECT: Record of Decision (ROD) for Montrose Settlements Restoration  
 Program Final Restoration Plan and Programmatic Environmental  
 Impact Statement/Environmental Impact Report

The Montrose Record of Decision (ROD) is attached for your review and approval. The Final Restoration Plan and EIS/EIR are also included.

The California Coastal Commission (CCC) reviewed the ROD, but raised one issue relating to its CZM consistency determination. Specifically, the

CCC conditionally concurred with the CZM consistency determination on grounds that the restoration plan would be consistent with the enforceable policies of the California Coastal Management Program *provided NOAA and the Co-Trustees continue funding Bald Eagle nest manipulations on Catalina Island in the amount of \$250,000/year for 10 years [emphasis added].*

The Montrose Settlements Restoration Program Trustee Council (NOAA, DOI/NPS, DOI/USFWS, California State Dept. of Fish and Game, California Dept. of Parks and Rec., and California State Lands Commission) evaluated the provision proposed by the CCC and concluded the Commission's condition was unacceptable. Specifically, on behalf of the Montrose Settlements Restoration Program Trustee Council, NOAA GC responded on March 13, 2006:

The Co-Trustees have concluded to cease funding for further Bald Eagle nest manipulations on Catalina Island until a comprehensive approach to restoring the eagles through the Channel Islands is developed, in or around 2008. *This determination is largely as a result of an assessment of egg contamination data over the past 15 years that indicates no Bald Eagle pairs on Catalina Island are likely to reproduce successfully on their own any time in the foreseeable future [emphasis added].*

If you sign the ROD, it is quite possible that the CCC will take no further action. However, should they choose to pursue the matter further, the CCC has two options. They could request non-binding mediation assistance from the Secretary of Commerce to help resolve the dispute between the CCC and NOAA. Alternately, the CCC could proceed with litigation under a claim that the proposed restoration actions are not consistent with the enforceable provisions of the California Coastal Act. It is highly unlikely that the CCC will choose to litigate this matter. However, should they choose to litigate or mediate, NOAA's legal position would be very strong for several reasons: the Catalina funding decision to which the CCC objected was (1) outside their jurisdiction, (2) determined by the Trustees to be consistent with the California Coastal Act, and (3) based on the sound, professional judgment of the State and federal agencies with expertise in bald eagle recovery. These points were communicated to the CCC in the Trustees' response to the CCC's objection.





## **RECORD OF DECISION**

### **FINAL PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT NATURAL RESOURCE RESTORATION PLAN MONTROSE SETTLEMENTS RESTORATION PROGRAM**

National Oceanic and Atmospheric Administration

#### **I. DECISION TO BE MADE**

This Record of Decision (ROD) documents the decision by the National Oceanic and Atmospheric Administration (NOAA) to select the Preferred Alternative in the Restoration Plan and Final Programmatic Environmental Impact Statement (EIS) and Environmental Impact Report (EIR) for the Montrose Settlements Restoration Program (MSRP). The Restoration Plan EIS/EIR has been developed to guide the restoration of injured natural resources and the services they provide. It has been prepared in accordance with federal regulations implementing the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) at 43 C.F.R. Part 11 and the provisions of the final consent decree for the Montrose case (United States of America and State of California v. Montrose Chemical Corporation, et al.). It has also been prepared to fulfill federal and state environmental impact assessment requirements under the National Environmental Policy Act (NEPA), 42 U.S.C. Section 4321, et seq., and the California Environmental Quality Act (CEQA), California Public Resources Code Parts 21000 – 21178.1. NOAA is issuing this ROD pursuant to NEPA regulations at 40 C.F.R. Parts 1500-1508. This decision is based upon the analysis included within the Restoration Plan EIS/EIR issued November 18, 2005 (70 F.R. 69967).

#### **II. INTRODUCTION**

The Montrose Restoration Plan EIS/EIR analyzes potential impacts to the human environment from the implementation of actions to restore natural resources and the services they provide in the Southern California Bight. The natural resource injuries being addressed by this plan resulted from historical releases of DDTs and PCBs from the Montrose Chemical Corporation facility in Los Angeles, California and other facilities (a complete list of the defendants is included in the Restoration Plan EIS/EIR). The Restoration Plan EIS/EIR is a means of determining and disclosing the potential environmental impacts of the Proposed Action for the MSRP.

There are six federal and state agencies responsible for planning and implementing natural resource restoration pursuant to the settlements of the Montrose case. These six agencies are NOAA, U.S. Fish and Wildlife Service, National Park Service, California Department of Fish and Game, California State Lands Commission, and California Department of Parks and Recreation. These agencies have established a Trustee Council on which NOAA is the lead Trustee. Under the terms of the final Montrose consent decree and the Trustee Council Memorandum of Agreement, the Trustees retain joint authority and responsibility to use the damages received to reimburse past damage assessment costs, restore injured natural resources, and compensate for the loss of services they provide.

## **Background**

From the late 1940s to the early 1970s, millions of pounds of DDTs and PCBs were discharged from industrial sources through a wastewater outfall into the ocean at White Point, near Los Angeles. These discharges resulted in widespread impacts on the natural and human environment. The contaminants, chemical mixtures banned in the United States today but manufactured in the past for pesticides and industrial purposes, contributed to severe declines in the populations of several species of birds, including the extirpation of bald eagles and peregrine falcons from the Channel Islands. The high levels of DDTs and PCBs in certain species of fish also led the State of California to issue consumption advisories, impose bag limits, and enact a commercial catch ban on certain types of fish. Although the releases were largely brought under control in the 1970s, these chemicals still contaminate the marine environment of the Southern California Bight.

In 1990, the United States of America and the State of California initiated legal action against the Montrose Chemical Corporation and the other polluters responsible for the discharges of DDTs and PCBs. In December 2000 the final settlement was signed, ending ten years of litigation. Under the terms of four separate settlement agreements, Montrose and the other defendants agreed to pay \$140.2 million plus interest to the federal and State governments. Of this amount, the Natural Resource Trustees received \$63.95 million, with an option that an additional \$10 million earmarked for EPA response actions may instead go to natural resource restoration, depending on the outcome of EPA's ongoing remedial investigation.

As required by Superfund law, the Trustees must use the settlement monies to reimburse damage assessment costs and restore the natural resources that were harmed by the chemicals at issue in this case. The Trustees must also prepare a restoration plan subject to public review. After reimbursing past damage assessment costs and including interest accrued, the Trustees had approximately \$38 million available for restoration as of 2005.

The MSRP Restoration Plan EIS/EIR identifies a set of actions to restore bald eagles, peregrine falcons and other marine birds, fish and the habitats upon which they depend, and to compensate the public for lost use of natural resources. The plan has been prepared as a programmatic EIS/EIR because restoration is being planned and implemented in phases, and not all of the actions evaluated as part of the first phase have been developed yet to a sufficient level of detail to allow for final environmental impact assessment. Subsequent NEPA and CEQA analysis will be performed as appropriate, as further details are developed on actions that are only conceptual at present, and as the Trustees prepare to select further restoration actions for implementation in a second phase of restoration. The current Restoration Plan EIS/EIR identifies a set of actions at a total estimated cost of \$25 million to be implemented in the first phase of restoration, estimated to run for approximately five years from the date of this ROD.

## **III. DESCRIPTION OF PROJECT ALTERNATIVES**

After gathering many potential restoration ideas during the public scoping phase of planning, the Trustees conducted an initial screening evaluation to narrow the list to a manageable number,

## Comparison of MSRP Restoration Alternatives

Potential Restoration Actions	Alternative 1 (No Action)	Alternative 2 (Preferred)*	Alternative 3*
<b>Fishing and Fish Habitat Restoration</b>		<b>\$12 million</b>	<b>\$12 million</b>
Construct artificial reefs and fishing access improvements		•	•
Provide public information to restore lost fishing services		•	•
Restore full tidal exchange wetlands		•	
Augment funds for implementing Marine Protected Areas in California		•	
<b>Bald Eagle Restoration</b>		<b>\$6.2 million</b>	<b>\$10 million</b>
Complete the NCI Bald Eagle Feasibility Study before deciding on further restoration actions.		•	
Complete the NCI Bald Eagle Feasibility Study; Regardless of its outcome, continue funding Santa Catalina Island Bald Eagle Program			•
<b>Peregrine Falcon Restoration</b>		<b>\$0.3 million</b>	<b>\$0.3 million</b>
Restore peregrine falcons to the Channel Islands			
Monitor the recovery of peregrine falcons on the Channel Islands		•	•
Restore peregrine falcons to the Baja California Pacific Islands			
<b>Seabird Restoration</b>		<b>\$6.5 million</b>	<b>\$2.7 million</b>
Restore seabirds to San Miguel Island		•	
Restore alcids to Santa Barbara Island		•	•
Restore seabirds to San Nicolas Island		•	
Restore seabirds to Scorpion and Orizaba Rocks		•	•
Restore seabirds to Baja California Pacific Islands <ul style="list-style-type: none"> <li>• Coronado and Todos Santos Islands</li> <li>• Guadalupe Island</li> <li>• San Jeronimo and San Martin Islands</li> <li>• San Benitos Islands</li> <li>• Asuncion and San Roque Islands</li> <li>• Natividad Island</li> </ul>		• (Coronado and Todos Santos Islands)	• (Coronado and Todos Santos Islands)
Create/enhance/protect California brown pelican roost habitat		o	
Implement entanglement reduction and outreach program to protect seabird populations		o	
Restore ashy storm-petrels to Anacapa Island		o	

\*-The budgets shown in this table reflect the total amounts of funding allocated for each resource category, including funds already expended for fish contamination and angler surveys, bald eagle work on Santa Catalina Island and the Northern Channel Islands, and a peregrine falcon survey, as described in more detail in the MSRP Restoration Plan EIS/EIR.

o-Should any of the proposed seabird actions be later determined inadvisable to pursue, the Trustees would provide public notice and use the available funds to proceed with one or more of the remaining seabird actions listed, which met the evaluation criteria but could not be included without exceeding the budget.

then evaluated these remaining 17 projects (some specific and some still conceptual) in greater detail in the Restoration Plan EIS/EIR. The above table identifies the 17 projects, and shows how different subsets of the 17 projects were combined to create two comprehensive action alternatives that fall within the \$25 million phase 1 budget. These two action alternatives, Alternative 2 and Alternative 3, were assembled to facilitate comparison of the trade-offs inherent in emphasizing different aspects and priorities within a comprehensive restoration approach. The following are summaries of the three alternatives analyzed in the Restoration Plan EIS/EIR.

**A. The No Action Alternative**

This alternative assumes that the Trustees would not implement projects to restore injured resources and lost services. Instead, the Trustees would rely on natural processes for the gradual recovery of the injured natural resources and would only take the limited action of monitoring this natural recovery.

**B. Alternative 2 – The Preferred Alternative**

Alternative 2 consists of projects to restore fishing and fish habitat, bald eagles, and seabirds in the Southern California Bight, and to monitor the recovery of peregrine falcons in the Channel Islands. The following describes the restoration projects included in Alternative 2.

**Fishing and Fish Habitat**

*Construct artificial reefs and fishing access improvements.* Since DDTs and PCBs persist in sediments in and around the Palos Verdes Shelf, the most highly contaminated fish are those associated with soft-bottom (sand, silt, or mud) benthic habitats. Under this action, the Trustees would construct reefs to recruit and/or produce reef and water-column-feeding fish that are lower in DDTs and PCBs. This action also provides for facility improvements to promote the use of the enhanced fishing sites and compensate for losses in fishing opportunity due to limitations imposed by fish consumption advisories.

*Provide public information to restore lost fishing services.* Fish contamination and a lack of public understanding about it currently impair the public's use and enjoyment of fish as a resource. This action consists of a public information program aimed at restoring the human use services provided by natural resources (i.e. fish).

*Restore full tidal exchange wetlands.* This action provides funds for the restoration of coastal wetlands that improve production of coastal fish. The Trustees propose to select one or more ongoing or planned larger-scale coastal wetland restoration efforts in the Southern California Bight and contribute funding toward their implementation.

*Augment funds for implementing Marine Protected Areas in California.* The Trustees propose to supplement the limited funding currently available for the management and monitoring of existing Marine Protected Areas (MPAs) to provide for a more sound scientific assessment of their effects on habitats and fish production within and outside their boundaries.

**Bald Eagles**

The Trustees are currently conducting a Bald Eagle Feasibility Study in the Northern Channel Islands to determine whether the bald eagles reintroduced onto the Northern Channel Islands will be able to reproduce without human intervention. Results are expected in or around 2008.

Since the 1990s, the Trustees had funded a program on Santa Catalina Island (one of the Southern Channel Islands) in which healthy eagle chicks were fostered into Catalina nests after defective eggs were removed. However, even today bald eagles on Santa Catalina Island continue to be exposed to high concentrations of DDTs from their diet and cannot reproduce on their own. Assessment of egg contamination data over the past 15 years indicates that none of the bald eagle pairs on Catalina are likely to be able to reproduce successfully on their own any time in the foreseeable future.

Since the Trustees are still gathering information on the feasibility of restoring bald eagles on the Channel Islands, the bald eagle projects identified in both Alternative 2 and 3 are only interim decisions. In Alternative 2, the Trustees will complete the NCI Feasibility Study and use its results and any other new data to decide future bald eagle restoration actions, in or around 2008. During the interim period under Alternative 2, the Trustees will suspend funding of the Catalina bald eagle nest manipulation program. After considering the results of the NCI Feasibility Study and any other new data, the Trustees will develop and provide for public review a proposed subsequent set of actions and environmental analysis, and decide on next steps for bald eagle restoration at that time.

### Peregrine Falcons

In Alternative 2, the Trustees propose to monitor recovering peregrine falcon populations on the Channel Islands through periodic surveys and contaminant analysis to determine the degree to which their numbers and condition are recovering to the baseline state.

### Seabirds

Seabird actions proposed for implementation under Alternative 2 are:

*Restore seabirds to San Miguel Island.* This action enhances seabird nesting habitat on San Miguel Island in the Channel Islands National Park by eradicating the introduced black rat over a period of approximately 5 years.

*Restore alcid to Santa Barbara Island.* This action re-establishes a once-active Cassin's auklet breeding population and augments Xantus's murrelets on Santa Barbara Island in the Channel Islands National Park through social attraction and habitat enhancement.

*Restore seabirds to San Nicolas Island.* This action restores the western gull and Brandt's cormorant colonies on the U.S. Navy-owned San Nicolas Island by eradicating feral cats on the island.

*Restore seabirds to Scorpion and Orizaba Rocks.* This action restores seabird habitat off of Santa Cruz Island, within the Channel Islands National Park, through the removal of non-native vegetation, the installation of artificial nesting boxes, and reduction in human disturbance.

*Restore seabirds to Baja California Pacific Islands (Coronado and Todos Santos Islands).* This action restores seabird populations using social attraction, habitat enhancement, and human disturbance reduction.

In addition to the seabird restoration actions listed above, there were other seabird restoration projects found to satisfy the Trustees' detailed evaluation; however, they could not be included without exceeding the budget identified for phase 1 of restoration. Should one or more of the above seabird actions be later determined inadvisable to pursue, the Trustees would provide public notice and use the available funds to proceed with one or more of the other seabird actions listed below that met the evaluation criteria but were not incorporated into this alternative.

*Restore ash storm-petrels to Anacapa Island.* This action facilitates breeding for the rare ash storm-petrel on Anacapa Island, using vocalizations and nest boxes.

*Restore seabirds to other Baja California Pacific Islands.* Additional seabird restoration actions similar in nature to those identified above for Coronado and Todos Santos Islands may be conducted on Guadalupe Island, San Jeronimo and San Martin Islands, San Benitos Islands, Asuncion and San Roque Islands, and Natividad Island.

*Create/enhance/protect California brown pelican roost habitat.* This action entails improvements to communal roosts by placement of floating docks or improvements to rock riprap structures to improve their suitability for seabird roosting.

*Implement an entanglement reduction and outreach program to protect seabird populations.* This action provides benefits to California brown pelicans and other seabirds by reducing injuries from entanglement with fishing line through public education and outreach.

### **C. Alternative 3**

The Trustees developed Alternative 3 through a reconsideration of some of the restoration priorities of the program. In this alternative, a greater level of effort is focused on restoration of continuing injuries and lost services (primary restoration), and consequently the set of actions proposed is less diverse than in the Preferred Alternative. Alternative 3 differs from Alternative 2 on bald eagle restoration by providing funding for the bald eagle nest manipulation program on Santa Catalina Island for the next several years regardless of the outcome of the NCI Feasibility Study. Thus, Alternative 3 reserves a greater level of funding for bald eagle restoration directed toward the Catalina birds until, and potentially long after, the conclusion of the NCI Feasibility Study. The funds available for seabird restoration are commensurately reduced. Alternative 3 also gives restoration of the continued lost fishing services greater emphasis than fish habitat restoration. Under this alternative, the Trustees would only pursue the construction of artificial reefs, construction of fishing access improvements, and restoration of lost fishing services through public outreach and information, and would not provide funds for MPAs or wetlands restoration.

## **IV. COMPARISON OF THE ENVIRONMENTAL CONSEQUENCES OF THE ALTERNATIVES**

The analysis of environmental consequences in the RP EIS/EIR focused on the following categories of resources having the potential to be affected by the proposed actions:

- Biological resources (fish, birds and other wildlife)
- Physical resources (earth resources, including sediments, water resources, and oceanographic and coastal processes)
- Human use (recreation, socioeconomics, and aesthetics)

Each of the two comprehensive action alternatives consists of a different combination of the potential restoration projects the Trustees evaluated in detail. These two comprehensive alternatives were compiled to compare different combinations of restoration actions that the Trustees may accomplish within the \$25 million funding level set for Phase 1 of implementation. Several of the individual projects evaluated in the plan are common to both action alternatives; some are only in one alternative, and some are not included in either. For completeness, the direct and indirect environmental effects, and cumulative effects of each project were analyzed in the Restoration Plan EIS/EIR regardless of whether they were included in one of the comprehensive action alternatives.

The following is a summary of the environmental consequences, including cumulative impacts, for each of the projects evaluated in detail and included in one or both action alternatives. This is a programmatic EIS/EIR, and seven of the 17 projects evaluated have been identified as needing subsequent NEPA analysis. More complete discussion may be found in Section 7 of the Restoration



## Plan EIS/EIR.

### *Artificial Reefs and Fishing Access Improvements*

- This action will convert soft-bottom aquatic habitat to reef habitat. The reduction of soft-bottom habitat on the limited scale feasible under this restoration action, when compared to the predominant extent of such habitat throughout the region, will not significantly affect the total available soft-bottom habitat to those species that rely on it.
- The potential for reef construction projects to adversely affect threatened or endangered species or essential fish habitat will be addressed in subsequent site-specific analysis. To the extent that reefs constructed under the MSRP program function as production sites for rockfishes or other species that are currently depleted, the reefs may benefit the management and recovery of these depleted species of fish.
- Reef-associated fish typically contain lower concentrations of DDTs and PCBs than soft-bottom species, so constructed reefs should lead to reduced exposures to these contaminants for anglers and for the biological organisms that prey on fish in the vicinity of the constructed reefs.
- It is possible that fishing pressure and thus fish mortality may increase in the vicinity of newly constructed reefs and/or where improvements to fishing access and amenities are constructed. However, with the implementation of mitigation measures discussed below, these potential impacts are not expected to be significant.
- The placement of concrete or rock materials into marine waters may cause short-term suspension of sediments at the reef construction site that may result in short-term water quality impacts. The principal effect will be increased turbidity; however, depending on local conditions, the sediments at the reef site might contain elevated contaminant levels. Also, placement of reefs in nearshore areas has the potential to disrupt the normal transport of sediment and affect the topography of adjacent subtidal and beach areas. However, with the implementation of mitigation measures discussed below, these potential impacts are not expected to be significant.
- Artificial reefs provide human use benefits beyond fishing, as they are also popular areas for scuba and free diving for purposes of recreation, hunting, and underwater photography. Depending on their location, design, and depth, artificial reefs could have adverse impacts on various other types of human uses. Uses that could potentially be impacted by shallow reefs include body surfing or wind surfing and, possibly, navigation. Also, constructed reefs will displace soft-bottom species, and the anglers who favor catching these species at the site of a constructed reef will find it harder to catch these fish. Potential impacts to recreational and navigational uses will be carefully analyzed during the selection of candidate sites.

### *Provide Public Information to Restore Lost Fishing Services*

- Should the public information program lead to changes in fishing practices in the region, it is possible that fishing exploitation of certain contaminated species of fish will decrease and fishing for cleaner species of fish will increase. It is also possible that the public information program could lead to increased fishing exploitation of fish populations in the locations that the program identifies as having fish lower in contamination. However, with the implementation of mitigation measures discussed below, these potential impacts are not expected to be significant.

- Development of better data on fish contamination and improved dissemination of information on fish contamination should provide recreational benefits for anglers. Minor impacts to aesthetics could occur if informational signs or kiosks are erected. These impacts are not expected to be significant.

#### *Restore Full Tidal Exchange Wetlands*

- The environmental consequences of restoring Southern California coastal wetlands are largely beneficial given the historical losses of such habitats, their relative scarcity today, and their valuable ecological functions. Wetlands restoration requires careful planning, analysis, and consideration of the trade-offs between different and sometimes competing biological resources and uses. MSRP funding will be specifically earmarked for actions that benefit wetlands-dependent marine fish species, which might conceivably alter the relative balance of habitat types targeted for restoration within an overall plan. However, this possibility cannot be fully analyzed until site-specific details are developed.
- Depending on their location and design, wetlands may provide benefits to water quality. Restoration of full tidal exchange may also increase contributions of sediment from terrestrial watersheds into coastal areas. Wetlands restoration projects could also have several indirect physical effects, including hydrological consequences, the need to identify disposal requirements for dredged material, and impacts on roads and utilities.
- Wetlands provide numerous active and passive recreational use values, including birding, boating, fishing, and other uses. Wetlands restoration may also impact current recreational and other human uses of sites slated for restoration. Environmental effects on human uses will need to be analyzed at a later stage, when more site-specific information is available.

#### *Augment Funds for Implementing Marine Protected Areas in California*

- This action will not establish new Marine Protected Areas (MPAs) or modify the boundaries or human use restrictions of the MPAs already established. Rather, this action will enhance implementation of these MPAs so that they will be managed and monitored in ways closer to those originally envisioned. MPAs are established for the purpose of restoring and/or preserving marine biological communities, so increased funding to improve management and monitoring efforts for MPAs may increase the beneficial biological effects for which the MPAs were established, or at the least improve our understanding of whether and the degree to which MPAs accomplish these objectives.
- Several potential benefits to human uses could result from improved effectiveness of the implementation of the Channel Island MPAs. Restoration of depleted resources within the boundaries of the MPAs could provide recreational opportunities outside of the reserve. Although the MPAs generally prohibit the taking of biota within the MPA boundaries, effectively managed MPAs have the potential to lead to spillover of fish to adjacent areas and thus improve fishing use outside their boundaries.
- Augmenting MPA implementation and enforcement (i.e., to levels closer to those originally envisioned) may have increased consequences on some human uses (e.g., fishing within their boundaries) above what might exist in the absence of MSRP support. However, these impacts would result from increased enforcement rather than the addition of new restrictions. Any human use impacts arising from enforcement of existing MPA restrictions were addressed at the time the Channel Islands MPAs were created.

*Complete the NCI Bald Eagle Feasibility Study before Deciding on Further Restoration Actions*

- Individual bald eagles will be impacted by the restoration efforts. Eight of the 34 bald eagles released on Santa Cruz Island as part of the Northern Channel Island (NCI) Bald Eagle Feasibility Study have died from various causes. Overall, the survival rate of eagles released on the Northern Channel Islands appears to be within the normal range of both eagle survival in the wild and a reintroduction program. The loss of several individuals is not considered significant in light of the overall recovery of the bald eagle in the United States and the efforts to restore this species to the Channel Islands.
- This course of action proposes to suspend funding of the Santa Catalina Island Bald Eagle Program after 2005 during the interim period until subsequent restoration decisions are made, in or around 2008. One potential outcome of stopping human intervention and allowing bald eagle nests to fail is that eagle pair bonds may break down and the birds may abandon the island. However, it is highly likely that bald eagles will remain on the island for several years despite their inability to hatch offspring naturally. Bald eagles in the wild typically live for 25 to 30 years, and Santa Catalina Island currently supports 15 to 20 birds of a wide range of ages. Currently, five bald eagle nesting territories are active on the island, and the Institute for Wildlife Studies reports that two birds are currently establishing a new territory near Avalon. Even assuming that the Santa Catalina Island bald eagles fail to hatch new chicks in the coming years, bald eagle experts do not expect that they will immediately break their pair bonds and abandon their Santa Catalina Island territories. Rather, it is likely that bald eagles will remain on the island, with their numbers diminishing gradually over a period of 10 years or longer as some of the birds die and are not replaced by others and as certain bald eagle pairs break their pair bonds and leave the island after several years of failing to produce chicks.
- The presence of bald eagles in the Northern Channel Islands (NCI) may provide benefits to the endangered island foxes on San Miguel, Santa Rosa, and Santa Cruz Islands. Predation by golden eagles on island foxes has resulted in precipitous declines in island fox populations on these islands. The presence of territorial bald eagles on the NCI will complement other efforts in the recovery of the island fox if they deter golden eagles from inhabiting the islands. As explained above, suspension of funding for the Santa Catalina Island Bald Eagle Program until the completion of the NCI Bald Eagle Feasibility Study is highly unlikely to result in the disappearance of bald eagles from Santa Catalina Island. Nevertheless, the Trustees have analyzed the potential indirect effects of a disappearance of bald eagles from Santa Catalina Island and have concluded that such a disappearance is not likely to adversely affect the endangered island fox. Unlike the Northern Channel Islands, island fox numbers diminished on Santa Catalina Island as a result of canine distemper rather than predation by golden eagles. An absence of bald eagles on Santa Catalina Island is unlikely to result in the future establishment of golden eagles on that island as it does not have a sufficient terrestrial vertebrate prey base to attract and sustain golden eagles. Also, unlike on the Northern Channel Islands, there is no nearby mainland source for golden eagles. NOAA informally consulted with the endangered species office of the U.S. Fish and Wildlife Service (USFWS) responsible for the Catalina island fox recovery. This office concurred with NOAA's finding that suspending the bald eagle funding was not likely to adversely affect the island fox.
- The restoration of bald eagles on the Northern Channel Islands is not expected to result in significant impacts to seabird populations. Seabirds are not a principal component of bald eagle

diets on Santa Catalina Island, and the same situation is expected to apply on the Northern Channel Islands.

- The presence of the bald eagle on the Channel Islands provides benefits to humans on many levels. The presence of bald eagles provides both aesthetic and recreational benefits to visitors. Also, the bald eagles inhabiting the Channel Islands, which are readily identified by their tags, range freely over great distances and have been sighted on the U.S. mainland, notably along the Southern California coast.
- The suspension of funding for the Santa Catalina Island Bald Eagle Program may lead to a diminishing number of bald eagles on Santa Catalina Island during the applicable time period. Fewer bald eagles could result in a reduction in the human use benefits they provide, as there may be fewer occasions for viewing the eagles.

*Complete the NCI Bald Eagle Feasibility Study; Regardless of its Outcome, Continue Funding Santa Catalina Island Bald Eagle Program*

- This course of action seeks to maintain bald eagles on Santa Catalina Island through human intervention (i.e. nest manipulation) for as long as funds remain available, both in the interim and after completion of the NCI Feasibility Study. Individual bald eagles will continue to experience reproductive injuries as intervention efforts maintain their presence on Catalina Island. These birds are exposed to sufficiently high levels of DDTs and PCBs that they experience reproductive failure. Also, at least one bald eagle death on Santa Catalina Island has been attributed to DDT poisoning. However, the loss of several individuals is not considered significant in light of the overall recovery of the bald eagle in the United States and the efforts to restore this species to the Channel Islands.
- The continued presence of bald eagles on Santa Catalina Island is not expected to result in significant impacts to seabird populations. Seabirds are not a principal component of the diets of the bald eagles on Santa Catalina Island.
- The presence of the bald eagle on Santa Catalina Island provides benefits to humans on many levels. Santa Catalina Island is a popular tourist destination, and the presence of bald eagles provides both aesthetic and recreational benefits to visitors on the island. Also, the bald eagles inhabiting the Channel Islands, which are readily identified by their tags, range freely over great distances and have been sighted on the U.S. mainland, notably along the Southern California coast. The bald eagle also plays an important role in the cultural history of the Channel Islands. The presence of bald eagles on the island therefore fills an important cultural as well as an ecological niche.

*Monitor the Recovery of Peregrine Falcons on the Channel Islands*

- A monitoring program would not result in significant impacts to the biological environment. Peregrine falcon pairs may be temporarily disturbed during certain monitoring activities (e.g., entering the nest to collect eggshell fragments or band young); however, the majority of the observations would be from a distance and would not disturb peregrine falcons.

*Restore Seabirds to San Miguel Island*

- The eradication of rats on San Miguel Island has a wide range of potential direct and indirect beneficial and adverse biological impacts which will be further assessed as this conceptual project progresses. The potential benefits of rat eradication on San Miguel Island include (1)

increases in small crevice-nesting seabird populations (such as alcids and storm-petrels), (2) decreased predation on ground-nesting seabirds, such as western gulls, (3) protection of the important seabird colonies on Prince Island and Castle Rock from rat invasion, (4) a decrease in predation of some terrestrial and marine intertidal invertebrates, and (5) broad ecological benefits to the San Miguel Island ecosystem.

- However, to eliminate rats from San Miguel Island, a highly efficacious rodenticide must be used to ensure complete eradication. The use of a rodenticide to eradicate rats will pose a primary and secondary risk of poisoning to non-target species on San Miguel Island. Of particular concern are the potential impacts to non-target species, such as the endemic deer mouse and the endangered island fox. Studies will be initiated to evaluate the potential risk of poisoning to non-target species and to develop appropriate mitigation measures.
- Generally, this action will have no known direct or indirect effects on the physical environment. Unintended temporary water quality impacts could result should some of the bait enter the marine environment.
- Because rats pose health and safety hazards and can cause destruction to supplies and equipment, the eradication of rats will benefit visitors and National Park Service (NPS) personnel on San Miguel Island. This action will improve health and safety standards at NPS facilities on the island and will eliminate a potential source of disease. However, the removal of rats from the island may reduce the human use and non-use benefits to any members of the public who value the presence of this species on the island.
- With the possible exception that project workers might experience skin irritation as a result of contact with bait, no negative impacts are expected on humans. Although rodenticides may be toxic to humans, significant health effects are not expected unless standard safety precautions are ignored and very large doses are consumed.

#### *Restore Alcids to Santa Barbara Island*

- Restoring native vegetation and placing nest boxes in appropriate locations on Santa Barbara Island will provide a favorable environment for both Cassin's auklets and Xantus's murrelets, and should increase the number of breeding pairs of Cassin's auklets and Xantus's murrelets on the island, thereby increasing the number of offspring produced successfully.
- This project is expected to have minimal short-term adverse biological impacts. Additional human activity will occur on Santa Barbara Island as a result of this project that could result in temporary displacement of native wildlife or the trampling of native plants. However, these potential impacts are not expected to be significant.
- The removal of exotic vegetation may include the use of herbicides, which could have short-term adverse impacts on non-target plants. Subsequent monitoring may temporarily disturb target species. Potential short-term adverse environmental impacts that might occur during the removal of exotic vegetation will be addressed as part of the environmental compliance for this project.

#### *Restore Seabirds to San Nicolas Island*

- Eradication of introduced feral cats on San Nicolas Island will provide long-term conservation benefits for Brandt's cormorants and western gulls by removing a non-native predator from the

island ecosystem. The Trustees anticipate that this project will result in increased reproductive success for these species and therefore an expansion of these colonies. The colonies on San Nicolas Island are located within the center of their range and have historically supported large numbers of birds. Though they will still be subject to predation by the native island fox, it is anticipated that larger, more robust colonies will more effectively resist ongoing predation pressure from the island fox.

- This action could potentially affect the island fox due to its similarity in size to a feral cat and their similar diets. Although some short-term impacts might occur to individual foxes, the fox population will likely benefit overall from the eradication of feral cats, as they are competitors for food resources and habitat. The eradication methodologies and potential impacts will be addressed fully in subsequent environmental documentation for the project.
- In addition to benefiting seabirds, this project will also have collateral benefits to the island ecosystem. Sensitive species such as the island fox, the endemic deer mouse, the threatened island night lizard, and the threatened snowy plover will likely benefit from reduced predation and competition. The removal of feral cats will also likely benefit both resident and migratory land birds on San Nicolas Island.

#### *Restore Seabirds to Scorpion and Orizaba Rocks*

- Elimination of invasive plants and restoration of native plants will benefit burrow-nesting species of birds by providing increased nesting habitat and stabilization of the rapidly eroding soil horizon on Scorpion Rock. By providing additional high-quality breeding habitat, this action seeks to increase the number of breeding seabirds on the rock, in particular Cassin's auklets, Xantus's murrelets, and ash storm-petrels.
- Reducing human disturbance will have a positive influence on the survival of brown pelicans by reducing the energy expenditure associated with flushing and relocating due to human disturbance. In addition, reducing disturbance will protect nesting auklets and murrelets from harassment by trespassers.

#### *Restore Seabirds to Baja California Pacific Islands*

- Multiple seabird restoration projects are under consideration for the Baja California Pacific islands. Recent efforts to remove introduced species on many of these islands have resulted in opportunities to restore seabird populations. The effects of individual projects are summarized collectively below.
- The restoration activities proposed for the Baja California Pacific islands will result in direct benefits to a suite of seabirds, including the Cassin's auklet, Brandt's cormorant, double-crested cormorant, California brown pelican, ash storm-petrel, and Xantus's murrelet.
- Social attraction efforts will facilitate the re-colonization of seabirds on these islands after the removal of introduced species. Once attracted to the island, seabirds will be further encouraged to nest in suitable habitat by the presence of nest boxes. Although social attraction may only be used for a limited time, the re-colonization and recovery of historically occupied colonies will provide long-term benefits to seabird populations in the Southern California Bight, as the re-establishment of a colony of birds will likely serve as a natural attractant in perpetuity.
- A reduction in human disturbance around the colonies will significantly benefit roosting and breeding seabirds. Nesting seabirds that are sensitive to disturbance, such as California brown

pelicans and cormorants, will in particular benefit from a reduction in human disturbance.

- The increase in seabird populations that could result from this action will also likely benefit resident peregrine falcon pairs that prey on seabirds such as petrels and auklets. Because peregrine falcon pairs prey on a number of seabirds, increases in seabird populations may help buffer the impacts of increased predation by peregrine falcons.
- The waters around the Baja California Pacific islands offer many recreational and economic opportunities. Healthy and complete ecosystems support fishing communities around these islands. Seabird colonies are a valuable part of island ecosystems and provide economic benefits in the form of tourism.

#### *Create/Enhance/Protect California Brown Pelican Roost Habitat*

- Improvements in the existing network of communal roosts along the coast would have a positive influence on the energy budgets of pelicans by reducing the energy costs associated with (1) commuting between prey locations and roosts, (2) flushing and relocating due to human disturbance, and (3) using suboptimal microclimates within roosts. The expected population-level effects from improving the condition of individual birds are increased juvenile and adult survival and increased reproductive success for pelicans in California.
- The negative aspects of pelican use of harbors for roosting include the increased risk of contact with environmental contaminants (such as oil), the increased likelihood of injury due to scavenging (e.g., entanglement in fishing line or puncture from fishing hooks), and the development of nuisance issues. However, the project is not expected to result in major increases in pelican use of harbors. Rather, the goal would be to improve the quality of resting time within harbors.
- Other bird species that occur in association with roosting pelicans are likely to benefit from the proposed roost projects. Bird groups that would benefit from increased availability of island habitat and reduced human disturbance include gulls, terns, cormorants, shorebirds, herons, egrets, and ducks. The restoration projects would inform and enrich the public through associated interpretation displays and would help foster an awareness and stewardship ethic that should result in reduced disturbance to roosting California brown pelicans and other coastal waterbirds at other locations. Public enjoyment of pelicans would be increased by projects that allow the public to view communal roosting groups without causing disturbance.
- Given the relatively small scale of physical construction envisioned under this conceptual action, and given that pelican roost site enhancements would be constructed on existing physical features or structures, only minor physical effects are anticipated. However, pelican roost creation projects, if not carefully designed, could interfere with human activities or potentially create liability situations. Some projects would likely require ongoing inspection and/or management oversight. These issues would be addressed in subsequent planning and environmental documentation.

#### *Implement an Entanglement Reduction and Outreach Program to Protect Seabird Populations*

- The use of signs and brochures would help promote public awareness of entanglement issues and thus reduce bird injuries and deaths. Seabirds that would benefit from this project include California brown pelicans, cormorants, and gulls. A successful outreach program would aid in the ongoing recovery of the endangered California brown pelican by reducing a source of injury and death to the species. This program would provide information on the proper disposal of

fishing line. A reduction in fishing line debris would provide benefits to other marine organisms currently impacted by waste fishing line.

- The proper handling and disposal of fishing line would result in improved health and safety, as discarded hooks can injure humans as well as wildlife. Humans are also at risk of injury when attempting to disentangle a hook or line from a seabird. A reduction in seabird/angler interactions would result in improved recreation because hooking a seabird is a frustrating and unwelcome experience. The proper disposal of fishing line would also enhance the aesthetics of the fishing structure and its vicinity.

#### *Restore Ashy Storm-Petrels to Anacapa Island*

- With the recent removal of rats from Anacapa Island, this island once again constitutes high-quality breeding habitat for crevice-nesting seabirds such as the ashy storm-petrel. The combination of social attraction and nest boxes will provide a favorable environment for the establishment of an ashy storm-petrel colony. The colonization of Anacapa Island will provide long-term benefits to the ashy storm-petrel in the Southern California Bight, as the established presence of a colony of birds will likely serve as an ongoing natural attractant over the long term. Additional breeding sites buffer the potential catastrophic effects of oil spills and the negative impacts of non-native species on this species.
- This action will have minimal short-term adverse biological impacts. The playback of tape-recorded vocalizations causes little disturbance or trauma to birds if the duration of the playback is kept within reasonable bounds.

#### **Summary**

None of the actions under the Preferred Alternative for which this EIS/EIR constitutes final environmental analysis is considered to have significant individual or cumulative adverse biological impacts, even when considered in conjunction with other non-MSRP actions. For those individual projects in this Restoration Plan and Programmatic EIS/EIR requiring further planning, detail development, and environmental analysis, should significant secondary adverse biological effects be subsequently identified that cannot be sufficiently mitigated or avoided, the Trustees would not proceed but would instead pursue other restoration actions.

To the extent known at this stage in planning, no adverse impacts identified in the Restoration Plan EIS/EIR are expected to be significant. Any impacts which may occur may be minimized through the use of mitigation measures. Several individual projects require subsequent site-specific detail development and environmental analysis. Should any significant and unavoidable adverse environmental impacts be identified at a later stage in planning, they will be addressed in subsequent environmental documentation.

#### **V. THE ENVIRONMENTALLY PREFERABLE ALTERNATIVE**

As required by NEPA implementing regulations, NOAA is to discuss in this section of the decision “the alternative or alternatives which were considered to be environmentally preferable (40 CFR Part 1505.2 (b)).” The environmentally-preferable alternative is the alternative which causes the least damage to the biological and physical environment, and which best protects, preserves, and enhances historic, cultural and natural resources. The fundamental purpose of the proposed action is to implement projects that restore natural resources injured and services lost due to the DDTs and PCBs discharged to coastal waters of Southern California. Thus, determining the environmentally-



preferable alternative is a matter of determining which alternative most effectively addresses this goal. Alternative 2, the Trustees' Preferred Alternative, has been identified as the environmentally-preferable alternative as it provides the broadest benefit to biological resources and human uses affected by the contaminants of the Montrose case.

## **VI. NOAA DECISION AND FACTORS CONSIDERED IN THE DECISION**

In addition to identifying the environmentally-preferred alternative, NEPA implementing regulations require agencies to (1) state what decision was made, (2) discuss how the decision was affected by the preferences among alternatives based on relevant factors including economic and technical considerations and agency statutory missions, and (3) state whether all practical means to avoid or minimize environmental harm from the alternative selected have been adopted, and if not, why they were not. 40 C.F.R. Part 1505.2(a)(b)(c).

### **The Decision**

NOAA selects Alternative 2 as its choice for accomplishing the objectives of the MSRP. The rationale for this decision is discussed below. The rationale is fully supported by the environmental analysis documented in the Restoration Plan EIS/EIR. In reaching this decision, NOAA considered all reasonably foreseeable environmental effects of proposed actions and involved and informed the public in the decision-making process, as required by NOAA procedures for complying with NEPA, NAO 216-6, and NEPA regulations, 40 C.F.R. Parts 1500-1508.

### **Rationale for the Decision**

NOAA's decision to select Alternative 2 in the Restoration Plan EIS/EIR was reached after a comprehensive review of the relevant environmental, economic, and social consequences of the alternatives. The decision takes into account the requirements of the CERCLA and other applicable statutory, regulatory, and policy considerations (listed in Section 8 of the Restoration Plan EIS/EIR), and all public comment.

In crafting and analyzing the different alternatives, the Trustees evaluated competing needs, including the needs for primary and compensatory restoration across several resource categories, in comparison to each other and in consideration of the limitations of restoration funding available. Alternative 2 is the alternative that achieves the best balance among the suite of restoration projects considered, enabling NOAA and the Co-Trustees to best achieve the restoration objectives of the case. The following discussion summarizes the rationale for selecting Alternative 2 as NOAA's choice for restoring injured resources and lost services for the Montrose case.

### **No Action Alternative**

Although natural recovery may eventually occur for many of the injured resources, recovery would likely take a significantly longer time than it would under an active restoration scenario. Further, the interim losses of the services normally provided by the injured resources (e.g. public fishing benefits, benefits to the ecosystems) would not be compensated. In addition, certain events, such as

the extirpation of bald eagles and the introduction of exotic species on the Channel Islands, have led to consequences that may not be addressed under a natural recovery alternative. Because feasible restoration actions have been identified that would address the injuries and lost services of the case, the NOAA and the co-trustees found that this alternative, as an overall approach across all resource categories, does not fulfill the goals of the MSRP. However, this determination does not preclude selection of natural recovery as an option for specific resources (e.g., peregrine falcons) within the overall framework of a comprehensive restoration alternative.

### **Alternative 2 – The Preferred Alternative**

Based on detailed evaluations of potential restoration actions assembled during public scoping, NOAA and its co-trustees have determined that the set of actions assembled into Alternative 2 would most effectively address the continuing injuries and lost services of the Montrose case and compensate for past injuries. These actions include projects to restore fishing and fish habitat, bald eagles, and seabirds in the Southern California Bight, and to monitor the recovery of peregrine falcons in the Channel Islands. These actions will address all of the resource categories, their total cost falls within the limits of funding allocated for Phase 1 of restoration implementation, and where feasible they are in proximity to areas where injuries have occurred and/or continue to occur, yet are distributed throughout the Southern California Bight.

#### **Fishing and Fish Habitat**

Alternative 2 restores both human uses (fishing services) and fish habitat with a set of four actions that 1) employ different yet complementary approaches, and 2) focus principally on the geographical areas affected by State fishing advisories while still distributing benefits over the broad region of the marine environment affected by the contaminants of the Montrose case. The Trustees considered providing greater funding to a narrower set of fishing and fish habitat projects but decided, with consideration of public comments that it was preferable to distribute restoration efforts across the wider range of activities presented under Alternative 2.

Artificial reefs will be carefully located, designed and constructed to displace the more highly contaminated fish that occur around selected soft-bottom habitats affected by the Montrose contaminants. Associated facility improvements at fishing sites will promote the use of these sites and provide compensatory restoration for past losses in fishing opportunity.

Provision of public information builds upon and expands the public outreach and education work initiated by the U.S. Environmental Protection Agency through the establishment of the Fish Contamination and Education Collaborative. Fish contamination and a lack of public understanding about it currently impair the public's use and enjoyment of fish as a resource. By providing information to anglers so they can make knowledgeable choices about where and for which species to fish, the Trustees aim to not only reduce human exposures to contamination, but facilitate continued/increased use of the resources.

The restoration of certain coastal wetlands holds the potential to augment critical habitat for coastal marine fishes. Projects that involve coastal wetland/estuarine habitats that have direct tidal links to the ocean and serve as nursery habitats for fish, especially species that are targeted by ocean anglers (e.g. California halibut) will be given highest priority for funding.

Augmenting existing funds for managing and monitoring MPAs provides potential benefits not only to fish habitats adjacent to the Channel Islands, but also provides longer-term benefits for fish

habitats and fishing throughout California by contributing a sound empirical basis for the site and design of future networks of MPAs as a fisheries management tool to promote sustainable fish stocks in the region.

### Bald Eagles

The proposed bald eagle action is an interim one, to complete NCI Feasibility Study and use its results and other new data to guide future bald eagle restoration actions after a more complete understanding of the conditions across all of the Channel Islands is known, in or around 2008. In light of the continuing high levels of contamination in bald eagles on Catalina Island, the Trustees find that continued funding of the current Catalina Island bald eagle nest manipulation program over the near-term is unlikely to achieve the goal of long-term restoration of bald eagles to the Channel Islands. Thus, during the interim period until the NCI Feasibility Study is completed, the Trustees will focus restoration efforts on the Northern Channel Islands, which hold the potential for long-term restoration, and suspend funding of the Catalina bald eagle nest manipulation program. The Trustees consider it highly unlikely that bald eagles will disappear from Catalina Island in the intervening period, even if the nest manipulation program is suspended. After considering the results of the NCI Feasibility Study and, as appropriate, other new data such as further monitoring of the bald eagles on Catalina Island, the Trustees will develop a subsequent plan and environmental review to address next steps for bald eagle restoration, and release it for public review and comment.

### Peregrine Falcons

In part from previous active peregrine falcon restoration efforts, the number of breeding pairs of peregrine falcons on several of the Channel Islands is increasing. The proposed action for peregrine falcon restoration consists of monitoring the recovery of peregrine falcon populations on the Channel Islands through periodic surveys and contaminant analysis to determine their numbers and condition relative to their baseline state (but for the release of the contaminants of the case). The Trustees also recognize that peregrine falcons will benefit from seabird restoration projects, as an increase in the numbers of seabirds increases the availability of the preferred prey of peregrine falcons.

### Seabirds

The seabird restoration projects incorporated into Alternative 2 encompass a diverse set of projects that provide for significant benefits to several species of seabirds. Evidence indicates that the seabird species benefiting from these actions are known to have been injured by DDTs or had elevated levels of DDTs in their eggs. The Trustees have selected those seabird restoration actions considered to provide the greatest restoration benefits within the limits of funding.

### Summary

Having considered the restoration goals and objectives, the current state of recovery of resources, and the continuing presence of contamination, the Trustees believe that Alternative 2 represents an optimal distribution of funding for natural resource restoration across the demonstrated injury types for the purposes of both primary and compensatory restoration.

## Alternative 3

In this alternative, a greater level of effort is focused on restoration of continuing injuries and lost services (primary restoration), and consequently the suite of actions proposed is less diverse than in the Preferred Alternative. A significant difference between Alternative 2 and 3 is how bird restoration funding is allocated. Alternative 3 provides a greater proportion of funding for bald eagle restoration through the continuation of an ongoing nest manipulation program for bald eagles on Catalina Island, rather than awaiting the outcome of the NCI Feasibility Study to determine the best restoration approach for bald eagles. Thus, Alternative 3 requires a greater level of funding for bald eagle restoration to sustain the Santa Catalina Island birds until, and potentially long after, the conclusion of the NCI Feasibility Study. The funds available for seabird restoration are commensurately reduced.

Also under Alternative 3, restoration for the continuing loss of fishing services is given greater emphasis than fish habitat restoration. Under this alternative, the Trustees would focus on construction of artificial reefs and fishing access improvements and the public information program to restore lost fishing services, which under the Trustees' evaluation were found to have the greatest potential to improve fishing services. While both approaches achieve restoration objectives to some degree and are consistent with the evaluation criteria, NOAA and the Trustees have concluded that the more diverse set of actions to restore fishing and fish habitat under Alternative 2 have a greater likelihood to achieve the restoration objectives.

#### **EPA Comments on the Environmental Impact Statement**

In their comments on the Final EIS, EPA Region 9 commended the Trustees for deferring the decision regarding bald eagle restoration until after the NCI study results are known. However, EPA questioned whether the decision to cease the funding of the Catalina Island bald eagle nest manipulation program during the interim was consistent with the Trustees' continued funding of this program up to this point. The Trustees do not find it inconsistent with previous actions to cease the Catalina Island bald eagle program funding at this point, given the additional data now available on trends in contaminant levels in failed eggs and the absence of any natural hatching of chicks after the further passage of several years.

The EPA subsequently published a notice in the Federal Register on January 13, 2006, indicating no objection to the Trustees' proposed action.

#### **VII. MITIGATION MEASURES AND MONITORING**

As mentioned previously, NEPA regulations require that agencies identify in the ROD whether all practical means to avoid or minimize environmental harm from the alternative selected have been adopted, and if not, why they were not. 40 C.F.R. Part 1505.2(a)(b)(c). The regulations further state that a monitoring and enforcement program shall be adopted and summarized where applicable for any mitigation. Mitigation measures are the practical means to avoid, minimize, and reduce impacts, and compensate for unavoidable impacts. Section 7.2 of the RP/EIS/EIR identifies mitigation measures to reduce adverse impacts from the restoration projects. Many of these measures will only be needed should subsequent site-specific environmental analysis identify that a potential for impacts exists. The mitigation measures are:

### Fishing and Fish Habitat

- Constructed reef locations will be evaluated to avoid impacts to eelgrass beds or other nearshore soft-bottom areas that are currently important and contain limited habitat types. State and federal fisheries agencies will be consulted to ensure appropriate reef design, size, and placement, and to ensure that long-term management will accommodate anticipated increases in fishing and other uses of the reef site.
- Adjustments to the methods and timing for reef material placement may be developed in consultation with regulatory agencies to address local conditions and reduce the potential short-term water quality impacts of the construction.
- The potential short-term physical impacts from placing rock or rubble at each potential reef site will undergo engineering and water quality analysis, and additional evaluation will be performed to identify measures to minimize adverse effects.
- When initiating a design for site-specific reef development, the MSRP will consider the potential adverse human use impacts identified above and avoid placement of reef material where it would cause such adverse impacts. Also, fishing reefs will not typically be constructed in areas shallow enough to affect surfing because swells and waves would deter development of the types of fish communities that are the intent of the reefs.
- The Trustees will consider both contamination levels and vulnerability to over-fishing as factors when providing fishing advice to anglers. Thus, the program will not advise anglers to target any species that is currently over-fished or at risk of future over-fishing due to population status or specific life-history characteristics that might make that species more vulnerable to over-fishing.
- Informational signs will be placed in consultation with appropriate local authorities in such a way as to minimize any impacts to the aesthetics of the surrounding area.

### Bald Eagles

- The Trustees' placement of approximately 12 young birds per year on Santa Cruz Island since 2002 may offset the potential reduction in opportunities for viewing bald eagles should their numbers diminish on Santa Catalina Island during the intervening years before a decision is reached on further bald eagle restoration.

### Peregrine Falcons

- The methods for monitoring peregrine falcons are well established and designed such that potential impacts to the birds are minimized. Seabird populations would continue to be monitored to determine whether they are being significantly impacted by increased predation pressure from the restoration of peregrine falcons to the Channel Islands.
- Impacts from peregrine falcon monitoring activities would be minimized through established survey techniques for peregrine falcons and avoidance of biologically sensitive areas, such as seabird colonies.

### Seabirds

- The removal of the rats from San Miguel Island will be timed according to a set of biological

conditions that maximize the probability of eradicating rats and minimize the potential impact to the San Miguel Island environment. This project will be designed and implemented in a manner that avoids, minimizes, and mitigates impacts to the natural environment on San Miguel Island. Comprehensive measures to avoid and mitigate any impacts from the project will be developed during the planning phase and addressed in subsequent environmental analysis. Particular emphasis will be given to the development of a comprehensive mitigation strategy for the island fox and deer mouse. The successful mitigation program used during rat removal on Anacapa Island will be considered during the development of a mitigation program for San Miguel Island.

- The San Miguel Island project will proceed only if the risks to non-target species, in particular the endangered island fox and endemic deer mouse, can be minimized to an acceptable level.
- Specific measures will be developed and implemented to prevent bait from entering the marine environment or to minimize and carefully monitor the amount entering the marine environment.
- To minimize the potential exposure of visitors, San Miguel Island will be closed for several days when rodenticides are applied. Recreational activities such as camping and hiking will not be permitted during this time. However, due to the distance of San Miguel Island from the U.S. mainland and the annual visitation rate of less than 200 campers each year, the closure of the island will not have a significant impact on recreational and visitor activities.
- The removal of exotic vegetation and the planting of native plants on Santa Barbara Island will be done during the non-breeding season to avoid impacts to nesting birds. Any herbicides will be applied in a way that avoids or minimizes adverse impacts and is in compliance with NPS policies and other applicable laws and regulations.
- Before initiating the feral cat removal program on San Nicolas, techniques that will vary according to the eradication methodologies selected will be investigated and employed in a manner that avoids and minimizes the potential for impacts to the non-target island fox.
- The removal of exotic vegetation and the planting of native plants on Scorpion and Orizaba Rocks will be done during the non-breeding season to avoid impacts to nesting birds. The National Park Service will consult with the U.S. Fish and Wildlife Service regarding project implementation to ensure that California brown pelicans will not be adversely affected. The use of matting will help minimize potential erosion and stabilize the soil. The use of nest boxes will minimize impacts to nesting alcid.
- When seabird restoration actions involve limiting human activity around seabird colonies, alternate routes will be provided to accommodate human activities on the islands.

## **VII SUMMARY FINDING**

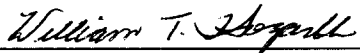
Through the EIS and documented in this ROD, NOAA has analyzed project alternatives, associated environmental impacts, the extent to which the impacts could be mitigated, and has considered the objectives of the proposed action. NOAA has also considered public and agency comments received during the EIS review periods. In balancing the analysis and public interest, NOAA has decided to implement the Council Preferred Alternative. NOAA also concludes that all practical means to avoid, minimize, or compensate for environmental harm from the proposed action have been adopted.

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